

REMARKS

This Amendment is submitted in reply to the final Office Action mailed on September 13, 2007. A Request for Continued Examination ("RCE") is submitted herewith. The Director is authorized to charge the amount of \$810.00 for the cost of the RCE and any additional fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 115808-520 on the account statement.

Claim 9 is pending in this application. Claims 1-8 and 10-48 were previously canceled. In the Office Action, Claim 9 is rejected under 35 U.S.C. §112, second paragraph, and 35 U.S.C. §103. In response, Claim 9 has been amended. The amendment does not add new matter. In view of the amendment and/or for the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

In the Office Action, Claim 9 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Patent Office alleges that, based on the phrase "at least one probiotic lactic acid bacterium, or culture supernatant thereof, present in an ingestible carrier in an amount of at least 10^5 cfu/g," it is not clear whether the bacterium, the supernatant, or the carrier are present in an amount of at least 10^5 cfu/g. See, Office Action, page 2, lines 15-19.

In response, Claim 9 has been amended to recite a nutritionally complete pet food comprising an ingestible carrier having 1) at least one component selected from the group consisting of a probiotic lactic acid bacterium, a culture supernatant of a probiotic lactic acid bacterium, and combinations thereof, present in an amount of at least 10^5 cfu/g, 2) at least one yeast present in an amount of at least 10^5 cfu/g, and 3) at least one synthetic or natural carotenoid with or without provitamin A activity present in an amount of from about $10^{-12}\%$ to 20% by weight. The amendment is supported in the specification at, for example, page 6, lines 11-13; page 6, lines 22-25; page 7, lines 1-2; and Abstract. In view of the amendment, Applicants respectfully submit that the skilled artisan would recognize that either the probiotic lactic acid bacterium, or a culture supernatant of the lactic acid bacterium, must be present in the ingestible carrier in an amount of at least 10^5 cfu/g. As such, Applicants respectfully submit that the scope of Claim 9 has been clarified and that the rejection under 35 U.S.C. §112, second paragraph is

thereby rendered moot. For at least these reasons, Applicants submit that Claim 9 fully complies with 35 U.S.C. §112, second paragraph.

Accordingly, Applicants respectfully request that the rejection of Claim 9 under 35 U.S.C. §112, second paragraph be withdrawn.

In the Office Action, Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,156,355 to Shields et al. ("*Shields*") in view of U.S. Patent No. 6,524,574 to Spangler et al. ("*Spangler*") and U.S. Patent No. 3,946,123 to Hanna ("*Hanna*"). Applicants believe this rejection is improper and respectfully traverse it for at least the reasons set forth below.

Currently amended independent Claim 9 recites a nutritionally complete pet food comprising an ingestible carrier having 1) at least one component selected from the group consisting of a probiotic lactic acid bacterium, a culture supernatant of a probiotic lactic acid bacterium, and combinations thereof, present in an amount of at least 10^5 cfu/g, 2) at least one yeast present in an amount of at least 10^5 cfu/g, and 3) at least one synthetic or natural carotenoid with or without provitamin A activity present in an amount of from about $10^{-12}\%$ to 20% by weight. The presently claimed pet food includes an admixture of very specific constituents that surprisingly and unexpectedly elicit an enhanced effect or response in respect of the photoprotection of the skin. See, specification, page 5, lines 6-8. In addition to showing that probiotics also exert an effect in an individual's body at a location distant from the region in which they colonize it, Applicants have surprisingly found that a composition having a synergistic photoprotective effect on the skin may be obtained by ingestion of a composition in accordance with the present claims. In contrast, Applicants respectfully submit that the cited references are deficient with respect to the presently claimed subject matter.

Contrary to the Patent Office's assertion, Applicants respectfully submit that the skilled artisan would have no reason to combine the cited references to obtain the present claims because the cited references are directed to unrelated products that have completely different objectives and fail to even recognize the surprising and unexpected effect that the specific composition has on the photoprotection of the skin.

For example, *Shields* is entirely directed toward canine food formulations that optimize digestibility of nutrients in specific canine breeds. *Shields* specifically discloses dog food formulations that take into account the genetic diversity and different food allergies of different

dog breeds. See, *Shields*, column 3, lines 30-36. *Spangler* is entirely directed toward controlling or inhibiting the colonization of certain deleterious bacteria in the intestines of monogastric animals and humans. As opposed to the present invention, which focuses on the effect that probiotics exert on the body of an individual at a location distant from the region in which they colonize it, *Spangler* focuses on the effects of probiotics in the intestines. See, *Spangler*, column 3, lines 3-9. *Hanna* is entirely directed toward a canned pet food containing a significant portion of synthetic cheese or meat chunks which are formed with cereal products. Specifically, *Hanna* discloses a pet food that is retort-stable and incorporates significant quantities of cereal products in pet foods while maintaining a sufficiently high level of a palatability in the final product. See, *Hanna*, column 1, lines 36-54. As such, Applicants respectfully submit that there is absolutely no guidance in the cited references for one of skill in the art to choose the active agents and amount of agents present in the instant claims to achieve the unexpectedly improved photoprotective effect on the skin as Applicants have done.

In sum, and in contrast to the presently claimed subject matter, the cited references are completely unconcerned with blocking or reducing the adverse clinical, histological and immunological effects of solar radiation exposure on the skin. Consequently, one having ordinary skill in the art would have no reason, or any reasonable expectation of success, to combine the cited references to arrive at a photoprotective composition in accordance with the present claims.

Moreover, Applicants respectfully assert that, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there exists no reason for the skilled artisan to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). This certainly applies here, where one of the cited references is directed toward a product that controls colonization of microorganisms in the gut and the remaining two references fail to even recognize any effects of microorganism colonization.

For example, *Spangler* discloses controlling or inhibiting the colonization of certain deleterious bacteria in the intestines or monogastric animals and humans. Contrary to the emphasis of controlling microorganism colonization to maintain a proper balance of naturally occurring beneficial microflora in the intestines, the present invention discloses that probiotics may exert an effect in an individual's body at a location distant from the region in which they colonize it. Specifically, Applicants have surprisingly found that a composition having a

synergistic photoprotective effect on the skin may be obtained by combining into an orally acceptable carrier at least a probiotic microorganism and a yeast. See, specification, page 5, lines 3-19. Therefore, while *Spangler* focuses on colonization of microorganisms in the gut, the present invention is directed toward the synergistic photoeffective effect that probiotics exert in an individual's body at a location distant from the region in which they colonize it. Moreover, *Shields* and *Hanna* fail to even recognize any beneficial effects that microorganism colonization may have on an individual's or animal's intestines, or even anywhere else in the body.

For at least the reasons discussed above, the combination of *Shields* in view of *Spangler*, and in further view of *Hanna* is improper and thus, fails to render the claimed subject matter obvious.

Accordingly, Applicants respectfully request that the rejection of Claim 9 under 35 U.S.C. §103 be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

A handwritten signature in black ink, appearing to read 'BY' followed by a stylized, looping signature.

Robert M. Barrett
Reg. No. 30,142
Customer No.: 29156

Dated: October 15, 2007